



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,470	11/14/2005	Moshe Szyf	26473U	5007
20529 7590 05/02/2007 NATH & ASSOCIATES 112 South West Street Alexandria, VA 22314			EXAMINER SHIN, DANA H	
			ART UNIT 1635	PAPER NUMBER
			MAIL DATE 05/02/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/518,470	<b>Applicant(s)</b> SZYF ET AL.	
	<b>Examiner</b> Dana Shin	<b>Art Unit</b> 1635	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-11 and 20-31 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-11 and 22-31, drawn to an oligonucleotide inhibitor comprising SEQ ID NO:5 and a method of inhibiting expression of MBD2 comprising administering an oligonucleotide inhibitor comprising SEQ ID NO:5.

Group II, claim(s) 1-11 and 22-31, drawn to an oligonucleotide inhibitor comprising SEQ ID NO:6 and a method of inhibiting expression of MBD2 comprising administering an oligonucleotide inhibitor comprising SEQ ID NO:6.

Group III, claim(s) 1-11 and 22-31, drawn to an oligonucleotide inhibitor comprising SEQ ID NO:7 and a method of inhibiting expression of MBD2 comprising administering an oligonucleotide inhibitor comprising SEQ ID NO:7.

Group IV, claim(s) 1-11 and 22-31, drawn to an oligonucleotide inhibitor comprising SEQ ID NO:8 and a method of inhibiting expression of MBD2 comprising administering an oligonucleotide inhibitor comprising SEQ ID NO:8.

Group V, claim(s) 1-11 and 22-31, drawn to an oligonucleotide inhibitor comprising SEQ ID NO:9 and a method of inhibiting expression of MBD2 comprising administering an oligonucleotide inhibitor comprising SEQ ID NO:9.

Group VI, claim(s) 1-11 and 22-31, drawn to an oligonucleotide inhibitor comprising SEQ ID NO:10 and a method of inhibiting expression of MBD2 comprising administering an oligonucleotide inhibitor comprising SEQ ID NO:10.

Group VII, claim(s) 1-11 and 22-31, drawn to an oligonucleotide inhibitor comprising SEQ ID NO:11 and a method of inhibiting expression of MBD2 comprising administering an oligonucleotide inhibitor comprising SEQ ID NO:11.

Art Unit: 1635

Group VIII, claim(s) 1-11 and 22-31, drawn to an oligonucleotide inhibitor comprising SEQ ID NO:12 and a method of inhibiting expression of MBD2 comprising administering an oligonucleotide inhibitor comprising SEQ ID NO:12.

Group IX, claim(s) 20-21, drawn to a method of identifying target genes for cancer therapy comprising treating a cell with one or more oligonucleotide inhibitors of MBD2 gene and analyzing gene expression by microarray analysis.

The inventions listed as Groups I-IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The inventions of groups I-IX are found to have no special technical features that define a contribution over the prior art of Slack et al. (*The Journal of Gene Medicine*, published online May 17, 2002, 4:381-389). See citation. The special technical feature of the first claimed invention is an oligonucleotide inhibitor comprising 7 to 100 nucleotides complementary to a mammalian MBD2/demethylase mRNA.

Slack et al. teach an antisense oligonucleotide targeted to the MBD2/demethylase gene sequence and a method of inhibiting its expression in cells by transfecting the antisense oligonucleotide to human cell lines. See pages 383-388.

Therefore, applicants' invention does not contribute special technical features when viewed over the teachings of Slack et al. Accordingly, the inventions of groups I-IX do not have a single inventive concept and so lack unity of invention, thus restriction for examination purposes as indicated is proper.

Art Unit: 1635

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Shin whose telephone number is 571-272-8008. The examiner can normally be reached on Monday through Friday, from 8am-4:30pm EST.

Art Unit: 1635

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Douglas Schultz can be reached on 571-272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dana Shin  
Examiner  
Art Unit 1635

  
J. DOUGLAS SCHULTZ, PH.D.  
SUPERVISORY PATENT EXAMINER